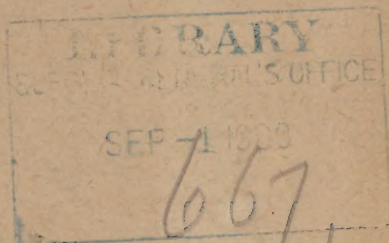


# ICHTHALBIN

(ICHTHYOL ALBUMINATE)

*The new Inodorous and  
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A Non-toxic Alterant,  
Antiphlogistic, and  
Assimilative. . . . .*

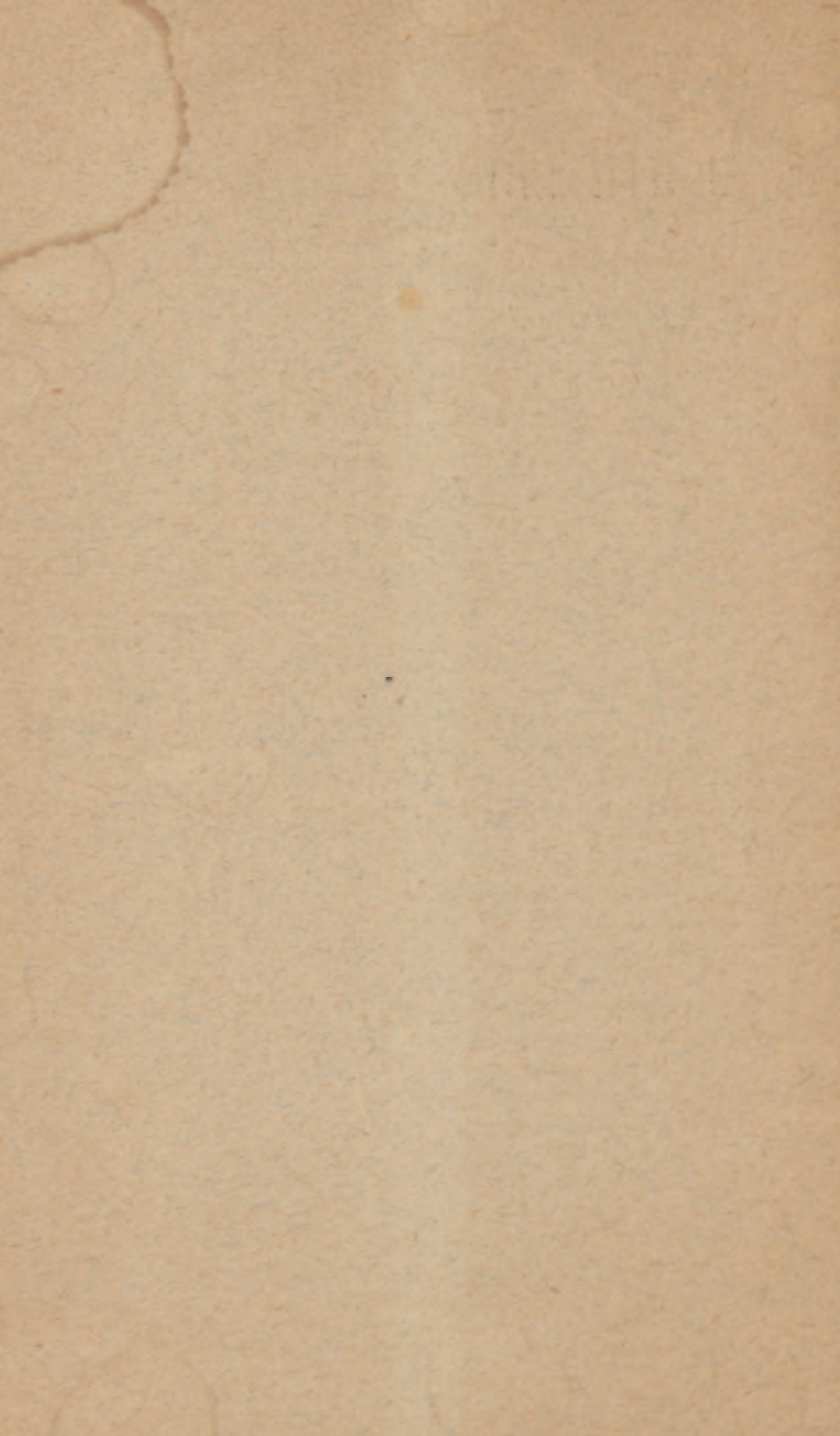
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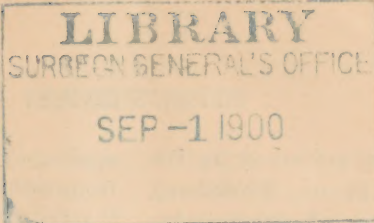


COLLECTIVE ...  
INVESTIGATION  
ON THE NEWER  
MATERIA MEDICA

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# ICHTHALBIN

(ICHTHYOL ALBUMINATE)

*The new Inodorous and Insipid form of Ichthyol for INTERNAL use. A Non-Toxic ALTERANT, ANTIPHLOGISTIC, and ASSIMILATIVE.*

**ICHTHALBIN.**—Suggested by DR. ARNOLD SACK, of Heidelberg. Prepared by precipitating Ichthyol with fresh Albumen—and, by prolonged heating or washing of the precipitate, removing the adherent ichthyolic odor and taste. Contains the equivalent of about 75% of Ichthyol pure. (Analysis by DR. HERM. VIETH.) The general properties and effects are stated below.

1. Grayish-brown powder; insoluble in water; odorless; almost entirely tasteless; readily taken by adults and children—(preferable herein to Ichthyol pure).
2. Insoluble in acid media such as the gastric juice; no nauseating or other untoward effect on stomach; hardly any eructation—(preferable herein to Ichthyol pure).
3. Slowly soluble in alkaline media such as the intestinal secretions; gradually liberating its Ichthyol component in the descent through the intestinal tract; not excretable so readily as Ichthyol pure by urine and feces—hence yielding a more persistent and cumulative beneficial effect on metabolism.
4. Absolutely innocuous and devoid of side-effects; unlimited dosage therefore permissible.
5. Regulates defecation; disinfects the intestine; stimulates appetite; augments assimilation;—generally possesses all the virtues—without any of the disabilities—of ordinary Ichthyol in internal administration, and hence is capable of a far more extended use.
6. In all *external* uses Ichthyol pure fully retains its pre-eminence, and cannot be supplanted by Ichthalbin; but the *internal* administration of Ichthalbin in skin and eye diseases answers excellently the indications for a capillary constrictor, anti-phlogistic and reconstructant.

[The above general characterization of Ichthalbin is taken from the preliminary report of its introducer, whose clinical experiences with it are summarized in the following pages]

—Method of Administration—See Page 7



From reports published by Dr. ARNOLD SACK, of Heidelberg, Baden, (*Deut. med. Wochenschr.*, 1897, No. 23; and *Monatsh. für prakt. Dermatol.*, 1897, No. 9) we gather the following:

#### INTERNAL UTILIZATION OF ICH- THYOL

Ichthyol, by means of its well-known contractile action on the vascular system, and especially on the capillaries, yields those widely beneficial effects that have made it the dominant resource in pathologic conditions of the most various forms, that are characterized by the presence of inflammation and exudation. It is a peculiarity of Ichthyol that when given by mouth it is readily digestible, and is assimilable by the different tissues of the body without loss of its distinctive virtues. Thus its contractile action is exercised on abnormally dilated vessels wherever situated in the organism; and is obtainable by internal administration as well as by topical application.

This power of Ichthyol to enter the arterial circulation and be carried by it throughout the system, and then to act selectively on the diseased tissues encountered on its way,—has led to its being very largely administered per os for the purpose either of obtaining its general constitutional benefits; or of producing local effects in places not accessible from the surface, or of reinforcing its topical

application by adjuvant action from within.

But the vaso-constrictor action of Ichthyol is only one of its prominent physiologic features. Another, of probably equal importance, is its pronounced stimulative and regulative action on the general metabolism; the effect being, in wasted and atonic conditions of the system or of special organs, a marked improvement of nutrition, elevation of general tone, augmentation of appetite and body weight, and regularization of all the digestive functions.

The same metabolic (accompanied by antiseptic) action is witnessed in the generally or locally morbid conditions of tissue structure—as in anemia, rachitis, scrofula, enteritis of various forms, tuberculous and syphilitic degeneration, catarrhal, rheumatic, arthritic and gonorrheal affections and sequels, etc; wherein it takes the shape of specifically alterative and reconstitutive processes of nutrition and growth affecting particularly the diseased tissue in the direction of its restoration to the normal status. These constitutional actions of Ichthyol give rise to additional indications—and to very pointed ones—for its *internal employment*; all the more so that Ichthyol has been found, after the most prolonged courses of medication with it, to be absolutely devoid of any toxic or otherwise deleterious by-effects.

## INCIDENTAL DRAWBACKS OF ICHTHYOL PURE, INTERNALLY

The practical utilization of these eminently important features of the Ichthyol therapy, which call for its internal use, has hitherto been hampered to a most annoying degree by the disagreeable *odor* and *taste* of Ichthyol, which could but imperfectly be masked by the usual pharmaceutical corrigents. These drawbacks have seriously interfered with the administration of Ichthyol to children, as well as to sensitive, nervous, or dyspeptic adults; and, in the long-continued courses of medication, even to persons who at first bore its taste well. And when, through exhibition by capsules or in corrigent vehicles, one succeeded in getting the drug ingested, the subsequent symptoms of nausea with copious eructation, and even of frequent vomiting caused by its reaction on the gastric walls, often resulted in the compulsory suspension of the medicament in cases where it must otherwise have been signally beneficial. Thus, a very large proportion of the good that might have been done with this medicament, had it not been unpalatable, was utterly cut off.

## ICHTHALBIN—A PERFECT FORM FOR ICHTHYOL INTERNAL MEDICATION

This notable grievance — of being seriously impeded in, or even wholly deprived of, the use of an excellent therapeutic agent in

many cases where it was decidedly indicated—caused Dr. Sack to search for relief in a novel way. The example of tannalbin (which enables tannin medication to be applied successfully to the entire length of the intestine without at all interfering with the normal stomach action) suggested to the author that a similar chemical modification—insoluble in water and in the gastric juice, but soluble in the intestinal secretions—might be obtained with Ichthyol. Accordingly, as tannalbin is an exsiccated combination of tannin with egg-albumen, on the same principle a combination of Ichthyol with albumen was prepared, from which the adherent traces of non-combined Ichthyol were subsequently removed by heat or by repeated washing. The success of the experiment was perfect. The combination thus obtained was found to be, as desired, devoid of the peculiar Ichthyol odor and taste, as well as of any direct local action on the stomach; while it *retained all the other and desirable physiological qualities and therapeutic activities* of the original Ichthyol, reduced only in their intensity of action in a ratio of 4 to 3; so that the doses of the new compound, in order to yield the full Ichthyol effect, must be made one-third larger than those customary for Ichthyol pure. The new compound, being a true chemical combination of Ichthyol

and albumen—an Ichthyol Albuminate—was named "ICHTHALBIN."

DISTINCTIVE PROPERTIES OF ICH-  
THALBIN

| Ichthyol is  | Ichthalbin is   |
|--|---|
| Readily soluble in water, gastric juice, and intestinal fluids. Apt to react disagreeably in the mouth as well as in the stomach. Partly excreted, unaltered, with the feces and with the urine, in consequence of its too ready solubility in the fluids of the body. | Insoluble in water and in acidulated pepsin solution; completely soluble in alkaline solutions. Two Gm. dissolve in 100 Cc. of 0.2% pancreas sodium carbonate solution at body temperature in 4 to 6 hours,—forming peptones and ichthyol-sodium. |

Herefrom it appears that Ichthalbin passes through the stomach unaltered, whence the eructations, so common after Ichthyol pure, are reduced to a minimum after Ichthalbin, and vomiting is wholly obviated; further, that Ichthalbin forms in the intestine soluble Ichthyol-sodium so gradually that a moderate absorption of nascent Ichthyol is *continuously* maintained.

Ichthalbin being, like Ichthyol pure, absolutely non-toxic, its dosage need not be anxiously restricted to a given general norm, but may freely be augmented according to the needs of individual

cases. The physiological and therapeutic powers of Ichthalbin may be safely taken to compare with those of Ichthyol as 3 to 4; that is, Ichthalbin possesses three-fourths the strength of Ichthyol.

The *antiseptic* power of Ichthalbin has not yet been accurately compared with that of Ichthyol pure by strictly controlled experiments; but preliminary tests have shown that both fresh urine and albumen solutions, which would develop strong ammoniacal fermentation and putrid decomposition in 2 to 4 days, remained perfectly clear and odorless for 8 days when an Ichthalbin solution had been admixed. Its prospective usefulness, therefore, as an internal remedy in infectious enteritis and intestinal fermentation, as well as externally in gonorrhea, remains a promising subject for clinical investigation.

CLINICAL EXPERIENCES WITH ICH-  
THALBIN

FIRST SERIES

*Externally*, the author found Ichthalbin to bring anal fissures to rapid healing, and to decidedly ameliorate the pruritus of hemorrhoids.

*Internally*, Ichthalbin was tried by Dr. Sack in some 30 cases, with very favorable results (reported in detail to the Medical Society of Heidelberg).

The general effects observed to follow the internal use of Ichthalbin were as follows: (1) Marked



reduction of all inflammatory and exudative processes associated with vascular dilatation, even in the most distant and peripheral regions; (2) regulation of the peristalsis, the dejections becoming softer, and greater in amount; (3) increase of appetite, patients suffering from malnutrition and anorexia soon exhibiting a desire for food, and frequently developing excessive hunger even; (4) increased nutrition, patients gaining in weight, the increase amounting to a pound per week on an average; (5) improved general tone and decided euphoria.

Wonderfully rapid alleviation and even complete recovery were effected in 6 cases of rosacea (particularly in those occurring in women suffering from menstrual irregularities and metritis) by the exhibition of Ichthalbin in doses of 4 Gm. (1 dr.) per day.

A few other cases with like favorable results were those of chronic eczema, especially in children.

The results in conditions of general atony, anemia, and emaciation were likewise of a highly encouraging character; leading Dr. Sack to the opinion that Ichthalbin will prove a most valuable reconstitutive and nutrient adjuvant even in phthisical and syphilitic cases.

Taken all in all, Ichthalbin bids fair to assume a commanding place in therapeutics, because, be-

sides being absolutely harmless, it is free from the disagreeable properties of Ichthyol pure, while possessing all its valuable powers of promoting assimilation and arresting the destructive metabolism of the proteid structures in the body. It is absorbed gradually and continuously, in measure only, as the nascent Ichthyol is liberated in the intestines; thus exercising a far more thorough and lasting action than Ichthyol pure.

#### SECOND SERIES

In his second report (read before the Dermatologic Section of the Twelfth International Medical Congress at Moscow), the author accentuates the eminent value of sulphur medication in this innocuous form, as provided by Nature in Ichthyol, and as specially adapted to internal use without nauseating effect by conversion into Ichthalbin. He gladly welcomes the herewith established possibility of a departure from the much-abused arsenical therapy in grave dermatoses, through the introduction of this entirely harmless agent, which can be given for an unlimited period, with never any depressing, but with tonic effect; and which forms a powerful and direct aid in combating, constitutionally, disorders of the most varied kinds that manifest themselves on the cuticle. (The conclusions arrived at, from a new series of dermatic cases cited in detail, are as follows:)

Ichthalbin is emphatically indicated wherever a dilated condition of the capillary vessels exists, as in rosacea; for, under its influence, the extremely distended vessels are observed constantly to contract more and more. In the purely seborrhoic forms, as in acne rosacea, it is less active. In the congestive dermatoses so common in plethoric children, and which are referable to a seborrhoic condition, Ichthalbin has been found efficacious when given for a long period. The remedy appears to be indicated with special importance, however, in all those cases where a mild tonic and antiseptic action on the intestine is required for an extended period,—that is in all those dermatoses of reflex or trophic character, coupled with difficultly definable intestinal disturbances, as in urticaria ex ingestis, in dubious pruritus partialis and universalis without anatomical basis, in so called lichen strophulus of poorly nursed children, etc. The marked success had with this remedy in this class of cases proves to the author's satisfaction that in dermatic therapy more attention ought to be paid to intestinal conditions than is usually done.

In large doses, Ichthalbin tends to the conservation of the albuminoid tissues, and is, hence, an irreplaceable remedy in all conditions in which phthisical phenomena constitute a factor. In the dermatologist's domain, this class of in-

stances is exemplified by those tuberculous affections of the skin that are accompanied by loss of body-weight; also in florid syphilis, and in various malign dermatoses. In lupus, where several months' treatment with tuberculin had occasioned loss of body-weight, not only was this loss effectively checked by instituting the simultaneous administration of Ichthalbin, but it was finally converted into an increase. In cases of syphilis, where the inunctions and other measures of specific treatment usually cause notable loss in weight, the author has almost invariably succeeded, by means of Ichthalbin in liberal doses, to check the emaciating and debilitating effects of the main treatment. Equal success was had with it in counteracting the emaciating consequences of the thyroid treatment in secondary lues non-amenable to mercury or to iodine. In every instance of similar nature, as these here touched upon, the character of Ichthalbin as a reconstitutive, nutrient and true tonic was made evident.

The author concludes his report to the Dermatologic Section with this admonition:—"Wherever we have hitherto used Ichthyol internally, we must now use Ichthalbin, which is, as shown, in its practical application far superior to the former; and where we have never yet tried Ichthyol, we are in duty bound to make at least an attempt with Ichthalbin when the nature



of the case is such that the demonstrated properties of this drug ought to benefit it."

#### RESULTS IN EYE-PRACTICE

Dr. Wolffberg, of Breslau, editor of *Wochenschrift für Therapie und Hygiene des Auges*, in No. 18 of 1898 has a leading article on "Ichthyol and Ichthalbin in Eye-practice," in which he states as follows:

He used about 500 grammes of Ichthalbin in forty cases, mostly of glaucoma and iritis, in all of which it promptly manifested a decidedly analgesic action, being given internally, 0.5 gramme (8 grains) 3 times per day. Also in mechanical irritation and inflammation of the conjunctiva, the pain was stilled and the hypophthalmas subsided. The author decidedly recommends Ichthalbin internally, in conjunction with proper topical treatment, also in other inflammatory conditions, as f. i. in fascicular keratitis, pannus, etc.

#### DOSAGE AND ADMINISTRATION

On these points Dr. Sack observes: "Ichthalbin is given in doses of from 1 to 2 Gm. (gr. xv to xxx) twice or three times daily,

and best directly before meal-time. To obtain good results the doses must not be too small; a normal dose for an adult may be considered about 1.25 Gm. (gr. xx), best taken dry on the tongue, and washed down at once by a swallow of water. If retained in the mouth for any length of time it will, of course, be affected by the alkaline saliva, and the taste of the liberated Ichthyol will become somewhat apparent.

#### FOR CHILDREN

"Up to 1 Gm. (gr. xv.) may be given to children, best mixed with a little powdered or scraped chocolate. In this form it is gladly taken by them, whereas they can scarcely be induced to take Ichthyol pure. Hence, when the various complaints of children (such as anemia, rachitis, scrofula, intestinal atony, intestinal catarrh, etc.), in which the remedy may advantageously be used, are considered, together with the well-known power of Ichthalbin to improve nutrition and regulate the bowels, and its antiseptic power,—the therapeutical value and advantages of this form of Ichthyol are obvious also in the pediatric field."

**ICHTHYOL.** of which Ichthalbin is the form for internal administration, has continuously attracted almost universal attention from its introduction. The explanation is simple. It affords the medical practitioner a natural soluble sulphur compound. In this peculiarity Ichthyol possesses a great advantage over the old galenical preparations formerly employed, as well as over the so-called "substitutes" for Ichthyol, in all of which the sulphur element is artificially introduced. In Ichthyol it is naturally combined. It has been successfully used against a large number of cutaneous and other diseases more or less dependent upon hyperaemia and enlargement of the capillaries, and consequent inflammation, or upon indigestion or malnutrition. Specifically, Ichthyol has received the sanction of leading authorities in medicine and surgery, in the following therapeutic characters: ANTIPHLOGISTIC in all forms of inflammation; ANTIPODAGRIC in acute and chronic gout; ANTIPRURITIC in cutaneous diseases; ANTIRHEUMATIC in muscular and articular rheumatism; ASTRINGENT in diseases of women; ALTERATIVE in scrophulosis, chlorosis, etc.; ANALGESIC in various painful affections; ANTICATARRHAL in influenza, coryza, etc.

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[From the Publishers' Announcement of January, 1898]

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[Prof. Wood's Announcement in the "American Medico-Surgical Bulletin" of January 10, 1898]

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"I would earnestly solicit, from my friends and colleagues throughout the profession, such support as they may find leisure to accord me in the work I have undertaken."

"HORATIO C. WOOD."



